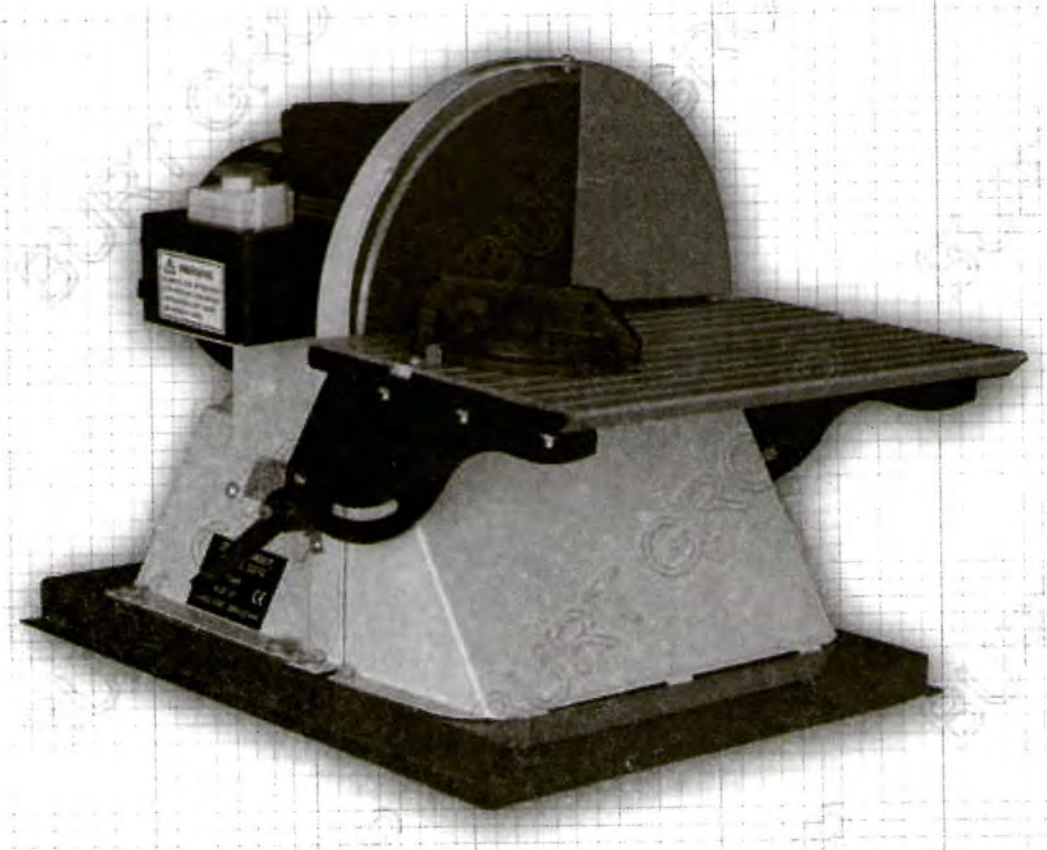
charnwood

Woodworking machinery at its best!

12" DISC SANDER
OPERATING INSTRUCTIONS

MODEL: W413



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WARNING!

Do not operate this unit until reading and becoming familiar with the entire operation manual.

WARNING!

Do not use this Sander System near flammable or combustible liquids, gases,gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural gas, hydrogen,or explosive dusts like coal dust,magnesium dust,grain dust, or gun powder.

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IMPORTANT SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However,if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, push sticks , hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. REMEMBER: Your personal safety is your responsibility.

WARNING:FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL. Learn the tool's application and limitations as well as the specific hazards peculiar to it.
2. KEEP GUARDS IN PLACE and in working order.
3. ALWAYS WEAR EYE PROTECTION.
4. GROUND ALL TOOLS.
5. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on".
6. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
7. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.
8. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
9. MAKE WORKSHOP CHILDPROOF - with padlocks. master switches, or by removing starter keys.
10. DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.
11. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
12. WEAR PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
13. ALWAYS USE SAFETY GLASSES. Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.
14. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
15. DON'T OVERREACH. Keep proper footing and balance at all times.
16. MAINTAIN TOOLS IN TOP CONDITION. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
17. DISCONNECT TOOLS before servicing and when changing accessories such as blades, bits, cutters,etc.
18. USE RECOMMENDED ACCESSORIES. The use of accessories and attachments no recommended by us may cause hazards or risk of injury to persons.
19. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in "OFF" position before plugging in power cord.
20. NEVER STAND ON. TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
21. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function-check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
22. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
23. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
24. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
25. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while motor is being mounted, connected or reconnected.
26. WARNING : The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and- provide for proper dust removal. Use wood dust collection systems whenever possible.

GENERAL SAFETY RULES FOR POWER TOOLS

WARNING:When using electric tools the following basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

PLEASE READ ALL THESE INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS PRODUCT.

1. **KEEP GUARDS IN PLACE, and in working order.**
2. **REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before tuming it on.**
3. **KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.**
4. **DON'T USE IN DANGEROUS ENVIRONMENT. Do not use power tools in damp or wet location,or expose them to rain. Do not operate them in an area with flammable liquids or gases. Keep work area well lighted.**
5. **KEEP CHILDREN AWAY. All visitors should be kept at a safe distance from work area.**
6. **MAKE WORKSHOP CHILD PROOF. Lock access of your workshop. When not in use. tools should be stored in a dry locked up place, out of reach of children.**
7. **DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.**
8. **USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.**
9. **USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord,be sure to use one heavy enough to carry the current your product will draw. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.**
10. **WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelet, or others jewellery which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above elbows.**
11. **ALWAYS USE SAFETY GOGGLES. Everyday glasses only have impact resistant lenses, they are NOT safety glasses.Also use face or dust mask if cutting operation is dusty.**
12. **SECURE WORK. Use clamps or a vice to hold work when practical.It is safer than using your hand and it frees both hands to operate tool.**
13. **DON'T OVERREACH. Keep proper footing and balance at all times.**
14. **MAINTAIN TOOL WITH CARE. Keep tool sharp and clean for best and safest performance. Follow instructions for lubrication and changing accessories.**
15. **DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters and the like.**
16. **USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.**
17. **NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if cutting tool is unintentionally contacted.**
18. **CHECK DAMAGED PARTS. Should any part of the tool be missing, damaged or any electrical component fails to perform properly, tum off the power and remove plug from power supply. Properly repair or replace damaged, missing and/or failed parts before resuming operation.**
19. **DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.**
20. **NEVER LEAVE TOOL RUNNING UNATTENTED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.**
21. **DO NOT ABUSE THE CORD. Do not use cord to disconnect during operation. Never yank the cord to disconnect it from the socket.**
22. **ALWAYS KEEP ALERT. Do not let familiarity gained from frequent use of your tool cause a careless mistake. Always remember that a careless fraction of a second is sufficient to inflict severe injury.**
23. **THINK SAFETY. Safety is a combination of common sense and alertness whenever the tool is in operation.**

IMPORTANT SAFETY RULES FOR

DISC SANDER

WARNING:

Basic precautions should always be followed when using your disc sander. To reduce the risk of injury, electrical should on fire, comply with the safety rules listed below:

1. WARNING: Do not operate your machine until it is completely assembled and installed according to the instructions.
2. CAUTION:The machine is designed to sand wood or wood-like products only. Sanding or grinding other materials could result in fire, injury or damage to product.
3. THIS MACHINE is intended for indoor use only.
4. IF YOU ARE NOT thoroughly familiar with the operation of Abrasive Finishing Machines, obtain advice form your supervisor,instructor or other qualified person.
5. The proper wood size is 120x60x60mm, if there is any tendency for the machine to tip over or move during certain operations when sanding long or heavy boards. The machine must be securely fastened to a supporting surface.
6. ALWAYS hold the work firmly on the table when sanding on the disc.
7. ALWAYS sand on downward side of disc. when using the disc portion of the machine, so that the work is held securely on the table. Sanding on the upward side of the disc could cause the workpiece to fly up which could be hazardous.
8. NEVER wear gloves or hold the work with a rag when sanding.
9. SAND with the gain of the wood.
10. DO NOT sand pieces of material that are too small to be safely supported.
11. AVOID awkward hand positions where a sudden slop could cause a hand to move into the disc.
12. WHEN sanding a large workpiece, provide additional support at table height.
13. DO NOT sand with the workpiece unsupported. Support the workpiece on the worktable.
14. ALWAYS remove scrap pieces and other objects from the table, backstop before turning the machine "ON"
15. NEVER perform layout,assembly or set-up work on the table while the sander is operating.
16. Always turn the machine "OFF" and disconnect the cord from the power source before installing or removing accessories.
17. NEVER leave the machine work area when the power is"ON"or before the machine has come to a complete stop.
18. Make sure sanding disc runs in the proper diretion.
19. Make sure the sanding disc is not turn or loose.

GROUNDING

1. In the event of a malfunction or breakdown, grounding provides a path of least resistance for the electric current, to reduce the risk of electric shock.
2. Do not modify the plug provided. if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment grounding conductor can result in the risk of electric shock. The conductor with the green outer insulation(with or without a yellow stripe), is the equipment grounding conductor. if repair or replacement of the electrical cord is necessary, do not connect the equipment grounding conductor to a live terminal.
4. Check with a qualified electrician or service man if the grounding instructions are not completely understood , or if there is doubt as to whether the machine in properly grounded.
5. Using only three extension cords.
6. Repair or replace damaged or worn cord immediately.
7. Your unit is for use on 230 volts only.
8. This appliance is not fused, make sure the appliance is grounded.

NOTE: The type of electrical plug and receptacle differs form country to country.

1. UNPACKING

Lay carton on stable workbench or floor, unpack the carton to check off in accordance with the following list. If you find any parts missing or damaging, please contact your local dealer for replacements immediately.

PACKING LIST

1.	Main machine	1
2.	Gauge w/ scale	1
3.	Instruction Manual	1
4.	Wrench 8-10	2
5.	Screw driver	1
6.	Wrench 75	1

3. INSTALLATION

Lay this unit on stable workbench, slide gauge w/ scale into slot on working table. Use hex bolt M8×40 and Hex nut M8 to mount machine on workbench, insert the power plug into the proper socket with a supply voltage of 230V This appliance is ready for working.

EXTENSION CORDS

Extension Cords

WARNING:

The use of damaged cords can shock, burn or electrocute.

Replace damaged or worn cords immediately.

WARNING:

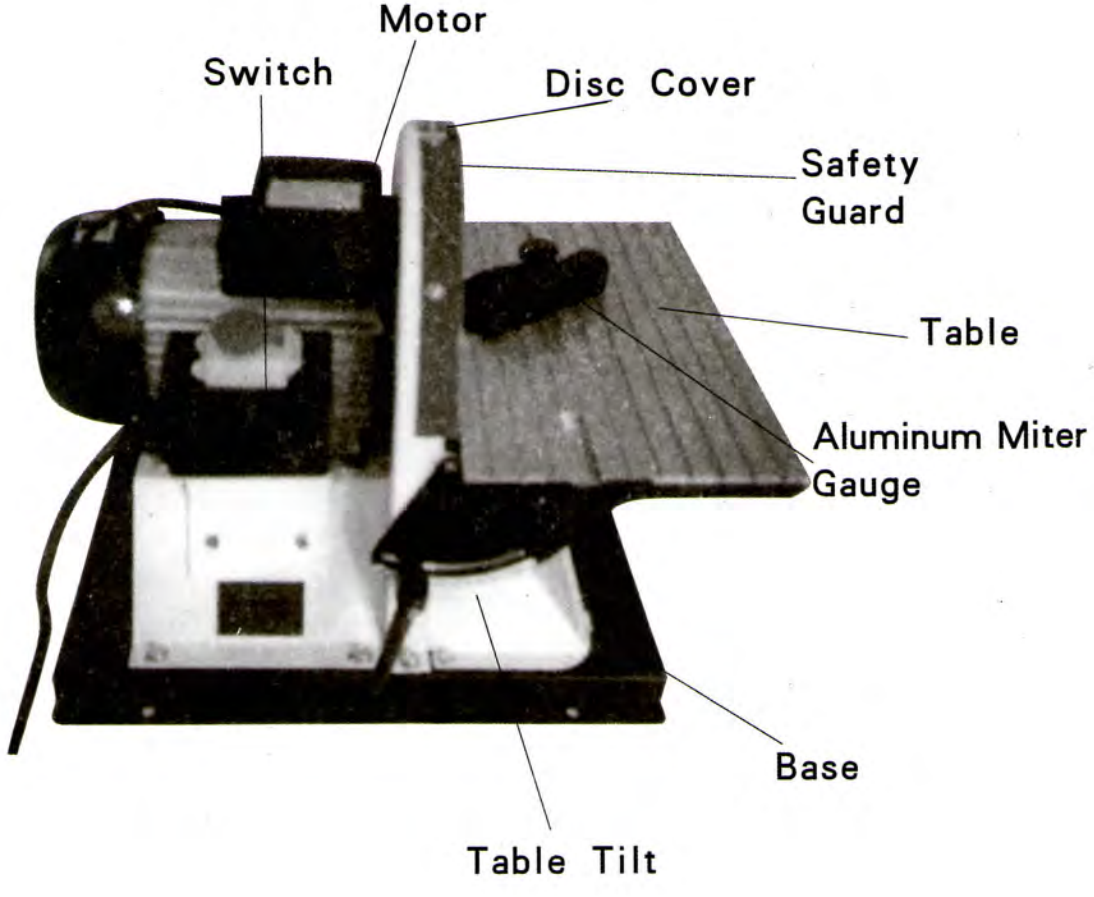
1. Make sure disc is not torn or loose.
2. Avoid kickback by sanding in accordance with directional arrows, sand on the downward side of the disc. Sanding on the upward side could cause the workpiece to fly up causing injury.
3. Always maintain a maximum clearance of 1.6mm between the table and the sanding disc.
4. Always wear eye protection when operating the sander.
5. The work table is the surface on which the workpiece rests when perforing a sanding operation.
6. Transporting / Carrying the machinery by holding the handle bar by one person.
7. Fixing the disc sander on the workbench by using 4 pcs 5/16"x 3/4"(M8x20) HEX. HD. screw.

MACHINERY DATA

MOTOR	230V/50Hz/750W
DISC	304mm
TABLE	400x225mm(Aluminum)
DISC SPEED	1430mm^{-1}
DUST HOOD	2-1/2"(63mm)
NET WEIGHT	30kg
GROSS WEIGHT	32kg

12" Disc Sander

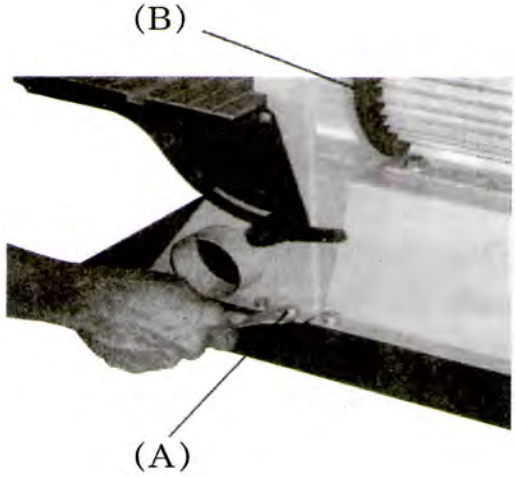
Disc Sanders are great accessory to form and shape the edges of parts. The aluminum table can be from 0 to 45 degree each way for any angle work. This disc sander has one 63.5mm dust port to make hoolup to a dust collection system or hose.



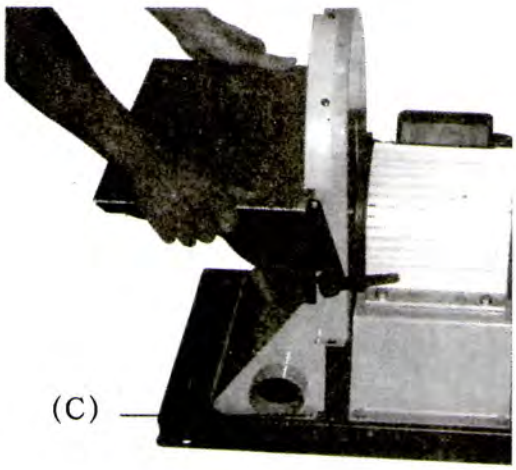
HOW TO REPLACE THE 304mm SANDING PAPER

WARNING:
Make sure tool is disconnected from power supply while motor is being mounted, connected or reconnected.

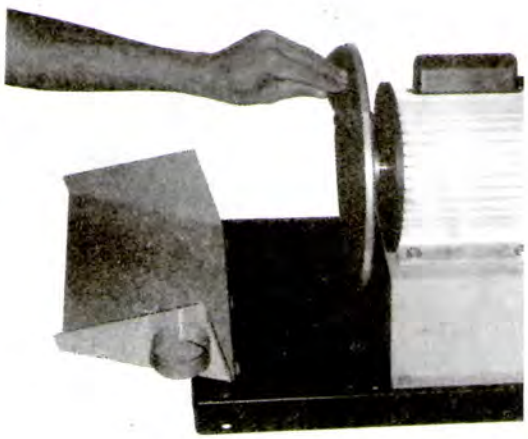
Step 1:
To change the sanding paper, please loosen the four-screw(A) (B),which are on disc cover left and right side and motor.
(A) screws are on the left and right side of disc cover.
(B) screws are the left and right side of motor.



Step 2:
Take off the disc cover with table. Then loosen the two-screw (C), which are on the dust hood cover left and right side.

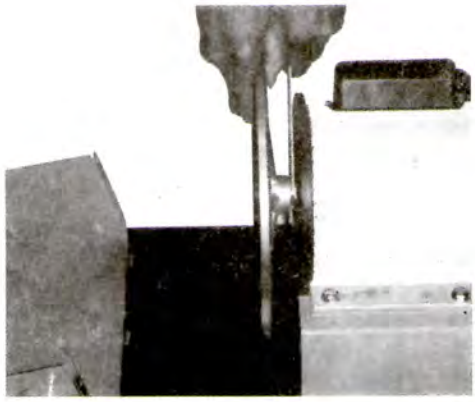


Step 3:
Open the dust hood cover,then you can replace the 304mm sanding paper easily.

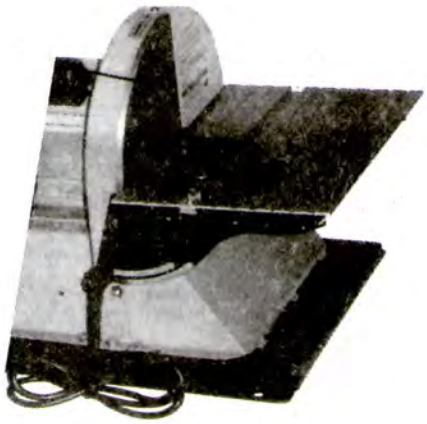


HOW TO CHANGE THE 304mm ALUMINUM DISC

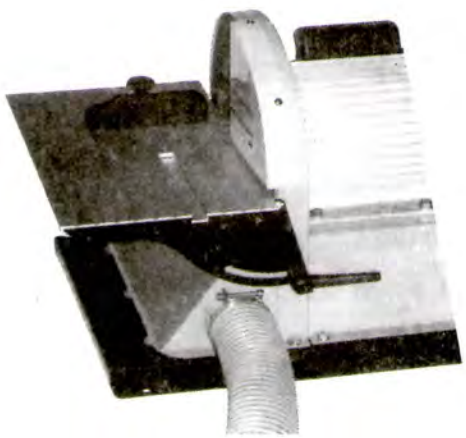
Open dust hood cover, fix the motor shaft by open-end wrench(p/no.47). Then turn the disc in the reversing direction to take the disc off from the motor shaft.



When operating the machinery, please ensure the direction of rotation.(Reversing)



Before turning on the switch, please make sure to put on the flexible hose into the dust hood, 2–1/2"(63mm), and with hose clamp.



Operation

Operation example 1

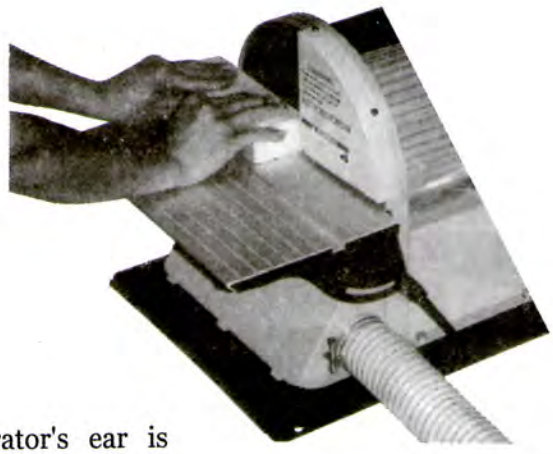
BEVEL SANDING

Loosen the handle (p/no.15) at double side, and the you can put the table to tilr 45 degree.

Operation example 2

SURFACE SANDING

Fasten the handle tightly (p/no.15) at double side, and then you can put the table to tilt 90 degree.



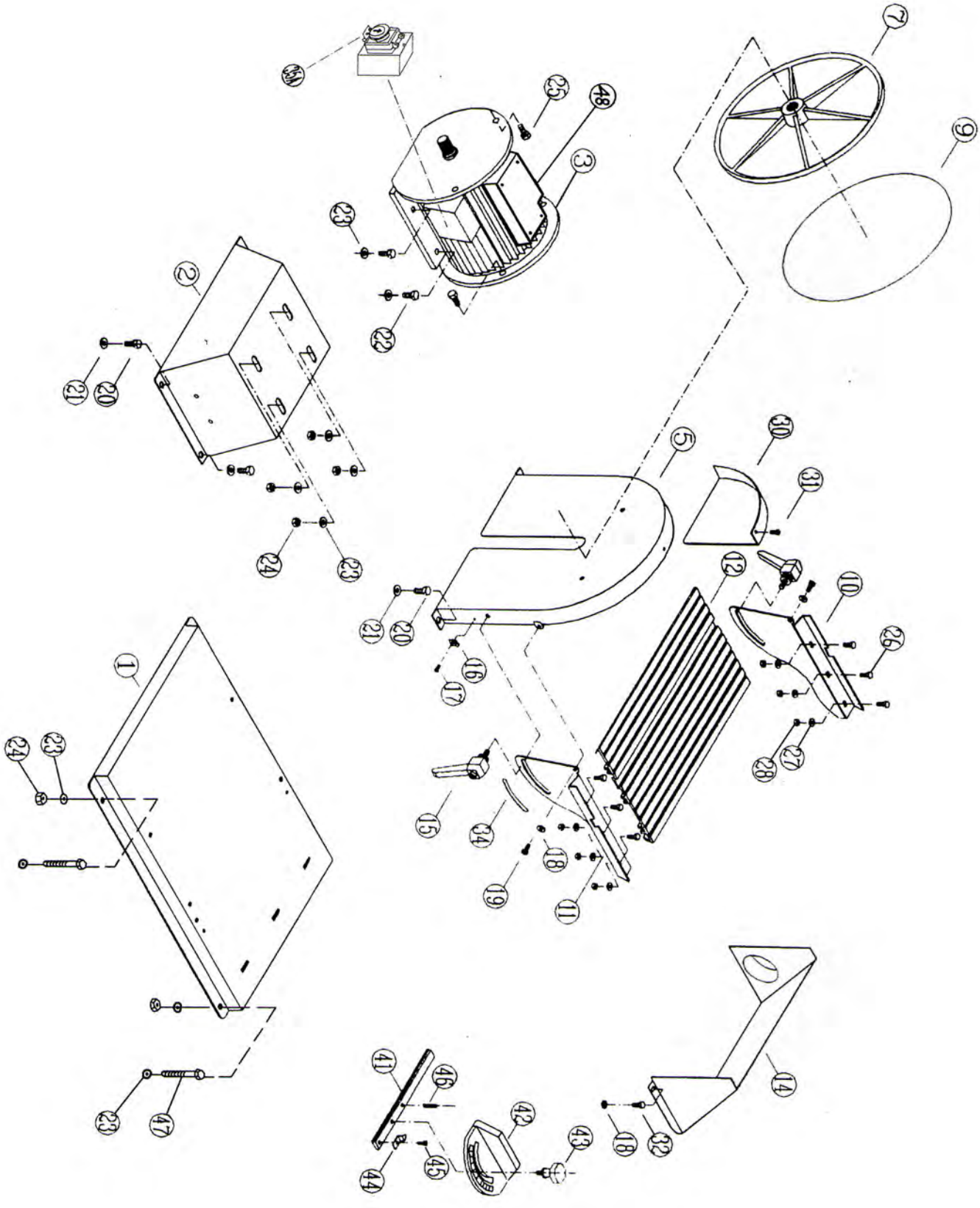
NOISE DATA

A- weighted equivalent sound pressure level at the operator's ear is La. eq =95.7 dB(A)

The sound power level emitted by the tool is L.w.eq=97.9dB(A)

PART LIST

PARTNO.	DESCRIPTION	SPECIFICATION	Q'TY
1	Base		1
2	Motor Base		1
3	Motor	1 HP	1
5	Right side disc cover		1
7	Disc (Right side)	305	1
9	Sanding paper		1
10	Left side tilting turning		2
11	Right side tilting turning		2
12	Table	Aluminum	2
14	Right side dust hood cover		1
15	Handle	M8x16	2
16	Pointer		1
17	Pan head screw	M4x8	1
18	Spring washer	M6	6
19	Pan head screw	M6x8	2
20	Hex. head screw	M8x12	6
21	Washer	M8	6
22	Hex. head screw	M8x20	4
23	Washer	M8x18	12
24	Nut	M8	8
25	Hex.head screw	M8x16	2
26	Hex.head screw	M6x12	6
27	Washer	M6x13	6
28	Nut	M6	6
30	Safety guard (Right side)		1
31	Round head Screw	M5x8	2
32	Hex.head screw	M6x10	2
34	Scale label (Right side)		1
35A	Switch	CE	1
41	Miter bar		1
42	Miter gage		1
43	bolt	M6	1
44	Pointer		1
45	Round head Screw	M5x6	1
46	Pin		1
47	Hex. head screw	M6x60	4
48	Motor junction box		1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ORDERING REPLACEMENT PARTS

Replacement parts may be ordered from your local distributor.When ordering replacement parts,always provide the following information:

1. The model number and serial number of the 12" disc sander.
2. The parts number.
3. The parts name.
4. The desired quantity of the part.

TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSE	CORRECTION
Motor does not run when power switch is pressed "ON"	1. Switch is burnt out. 2. Connection wire is loose or damaged.	1. Replace the switch. 2. Tighten wire or replace wire.
Motor does not run at full speed.	1. Power voltage is too low. 2. Motor is damaged.	1. Test voltage. 2. Check and repair motor
Motor does not reach full power.	1. Incorrect power wiring. 2. Overloaded.	1. Replace with the correct size of the power wiring. 2. Reduce load.
Motor overheating	1. Motor voltage is different 2. Moter is damaged	1. Check the voltage label 2. Check and repair motor